

**Amendments to the Specification:**

Please amend the paragraph beginning on Page 1, Line 28 and ending on Page 2, Line 4 as follows:

One of the resources that can be shared by a POSIX real time operating system, such as the one described in the document entitled, "POSIX document: Institute of Electrical and Electronic Engineers. Portable Operating system Interface--Part 1: System Application Program Interface (API)," ~~the reference document [1] at the end of the description~~ is the calculation time (central unit time). Distribution is implemented by a router that relies on a criterion of priority and a measure of the execution time of tasks to implement a scheduling policy.

Please amend the paragraph beginning on Page 3, Line 28 and ending on Page 4, Line 9 as follows:

An item of the known technique, ~~referenced [2] at the end of the description as discussed~~ in the document "Soft Real Time Scheduling for General Purpose Client-Server Systems" by David Ingram, considers the real time application scheduling problem in a general use operating system. This system is modified so as to take advantage of real time scheduling time while preserving the existing software. The architecture considered uses a POSIX-type scheduler. A QOS (Quality of Service) coefficient is defined by a couple of parameters: central unit time  $t$ , period of time  $t$ . A contract corresponding to such a coefficient defines that at least one duration  $t$  should be allocated to a task in each period  $T$ . ~~the scheduler is informed of the parameters to use~~ for each task.

Please amend the paragraph on Page 10, Lines 4-8 as follows:

Time management unit 15 receives from surveillance module 32 message 38 for reading current time and sends counter event message 40 via rerouting process 39. Scheduler ~~[[38]]~~ 18 sends task change event 43 to surveillance module 32 via rerouting process 42.

Please delete the Lines 1-10 on Page 14 as shown:

#### REFERENCES

~~[1] POSIX document: Institute of Electrical and Electronic Engineers. Portable Operating system Interface - Part 1: System Application Program Interface (API). 1-55937-061-0.~~

~~[0077] [2] "Soft Real Time Scheduling for General Purpose Client Server Systems" by David Ingram (www.uk.research.att.com/~dmi/linux-srt.)~~